



Avian Influenza HPAI H5N1 in Dairy

David I Douphrate, PhD, MPT, MBA, CPE, CSP
School of Public Health
Texas A&M University

Review of Events

- A multistate outbreak of HPAI A(H5N1) avian influenza in dairy cows was first reported on March 25, 2024.
- The outbreak began in the Texas-New Mexico milkshed and soon spread to other states:
- On April 1, 2024 Centers for Disease Control and Prevention (CDC) confirmed one human HPAI A(H5N1) infection in a dairy farm worker in Texas

Current Situation

- 16 states affected
- 928 herds (as of 1/20/25)
- 67 human cases
 - 40 dairy, 23 poultry, 1 unknown, 3 other
 - 1 death

Regulatory Response

- Documented human infections linked to cattle infections, though mild, highlight the need for enhanced biosecurity and monitoring.
- Animal
 - USDA
 - Mandatory milk testing
- Human
 - CDC
 - current risk to the U.S. public is considered low
 - Human monitoring is limited
 - persons with exposure to infected animals or contaminated materials, including raw cow's milk, are at higher risk for A(H5N1) virus infection and should take recommended precautions
 - personal protective equipment or PPE
 - self-monitoring for illness symptoms
 - if symptomatic, seek prompt medical evaluation for testing and antiviral treatment

Farm/Cow Impact

- Variable farm impact
- Case description
 - reduced feed intake and rumen motility in lactating cows
 - decreased milk production
 - thick yellow milk
- Animal recovery in 2-3 weeks with supportive treatment
 - About 10% of cows do not fully recover
- Preliminary findings suggest antibody resistance among infected cows
- Future milk productivity unknown

Sources of Transmission

- Exposure to infected milk
 - Parlor
 - Sick pens
 - Other
- Human exposure
- Continued research needed

Human Impact

- Flu-like symptoms
- Conjunctivitis (pink eye)
- Mild symptoms
- Recovery in 1 week

Human Impact

- Estimation of human impact limited
- Limited access to workers
 - Perceived risk among owners

Research Challenges

- Challenges related to farm participation in directed research
- Perception of business risk among owners
- Concern over anonymity & confidentiality

Texas A&M Project

- CDC funded
- Seroprevalence study
- Worker exposure survey
- IRB approved
- Total anonymity and confidentiality maintained of farm, owner, and worker

Texas A&M Project

- Producers and associations have provided input and guidance
- On-farm data collection
 - Survey administered
 - Samples collected from workers
 - Participant incentives

Texas A&M Project

- Seeking affected farms in impacted states for participation in project

Contact

David Douphrate

Texas A&M University

douphrate@tamu.edu

Cell: 970-980-8132

2025 SCOWCROFT INSTITUTE PANDEMIC POLICY SUMMIT

A CLOSER LOOK AT POLICY IMPACTS OF THE ONGOING H5N1 OUTBREAK IN THE U.S.

The Scowcroft Institute of International Affairs is pleased to announce the 2025 Pandemic Policy Summit to examine the ongoing H5N1 outbreak affecting the U.S. dairy industry.

This event aims to accelerate vital work to prevent this outbreak from becoming another pandemic while protecting the livelihoods of dairy farmers.

LOCATION

The Bush School DC
1620 L St NW,
Washington, DC

SAVE THE DATE



**March 18, 2025
8:30 am - 5:00 pm**



For more information, visit: <https://u.tamu.edu/2025PandemicSummit>



Scowcroft Institute
of International Affairs
THE BUSH SCHOOL • TEXAS A&M UNIVERSITY



TEXAS A&M HEALTH
USA Center for Rural
Public Health Preparedness

<https://usacenter.tamu.edu/Events1/2025pandemicconference.html>